

MINUTES OF THE NINTH MEETING OF THE PUBLIC SAFETY NATIONAL COORDINATION COMMITTEE

Date/Time: Friday, September 15, 2000; Meeting commenced at 9:30 a.m.

Address: Department of Commerce
Herbert H. Hoover Building – HCHB Auditorium (First Floor)
1401 Constitution Avenue, N.W.
Washington, D.C. 20230

Attendees: See attached list

Convening of Meeting: Michael Wilhelm, Designated Federal Official for the National Coordination Committee (“NCC”), convened the ninth meeting of the NCC. With a sign-language interpreter signing, Mr. Wilhelm inquired if anyone needed signing assistance; although no one responded, he said signing assistance, if needed, would be available during the meeting. He explained that Kathleen Wallman, NCC Chair, asked him to chair the meeting as she was in London. He introduced the NCC Steering Committee members or designees present, named Federal Communications Commission (“FCC”) staff present to assist the attendees, and said the three NCC Subcommittee chairs were present and would be making presentations from their meetings yesterday.

Ms. Wilhelm said today’s meeting would be devoted mainly to proposed comments that the NCC is filing in response to the FCC’s Fourth Notice of Proposed Rule Making (“Fourth NPRM”),¹ copies of which were available at the meeting, in the FCC’s Public Safety Docket. He explained that the NCC submitted its first recommendations to the FCC in February (hereafter, “NCC Report”),² that the Fourth NPRM is a direct result of those NCC recommendations, that the NCC would file comments to the Fourth NPRM on September 25, and that the FCC then would review all filings and issue a Report and Order establishing rules allowing the Public Safety community to begin using the 700 MHz public safety spectrum. He noted that while the NCC will file comments, attendees’ organizations also might want to file their own comments, and that reply comments are due to the FCC by October 10. He said the Subcommittees adopted positions on various issues the previous day pertaining to questions contained in the Fourth NPRM, which will be presented by the Subcommittee chairs to the Steering Committee today, and both the Steering Committee and the audience could ask questions before NCC Steering Committee consensus is reached. Once consensus is reached, Bob Gurss, at Ms. Wallman’s invitation, would draft substantive comments for the NCC, the draft will be circulated electronically to the Steering Committee for review to ensure the draft accurately reflects what the Steering Committee has decided, the comments would be finalized and filed with the FCC, and will be available on the NCC Web page. Mr. Wilhelm pointed out that these NCC proceeding are by consensus, with full opportunity for public comment, and requested that attendees’ remarks during the meeting be kept as short as possible, given the meeting’s time schedule. He then called for the Subcommittee Reports.

¹ The Development of Operational, Technical and Spectrum Requirements For Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010; Establishment of Rules and Requirements For Priority Access Service, WT Docket No. 96-86, *Fourth Notice of Proposed Rule Making*, FCC 00-271 (rel. Aug. 14, 2000), *Erratum* (rel. Aug. 14, 2000); 65 Fed. Reg. 51788 (Aug. 25, 2000).

² Public Safety National Coordination Committee’s Recommendations to the Federal Communication Commission for Technical and Operational Standards for Use of the 764-776 MHz and 794-806 MHz Public Safety Band Pending Development of Final Rules (Feb. 25, 2000). The NCC Report provided detailed technical information in its Report. A copy of the NCC Report can be obtained via the Internet at <http://www.fcc.gov/wtb/publicsafety/ncc.html>, or from International Transcription Services, Inc., 1231 - 20th Street, N.W., Washington, DC 20036, (202) 857-3800, TTY (202) 293-8810, or faxing ITS at (202) 857-3805.

Interoperability Subcommittee Report. John Powell, Chair, reported that Bob Schlieman is heading the working group that will complete the interoperability (“I/O”) report for the NCC’s second year report and is collecting all Subcommittee documents generated to begin that activity. The Subcommittee has been concentrating on operational requirements regarding identifying an appropriate document referencing the Incident Command System to forward to the Steering Committee, with the Subcommittee’s intent being that the Steering Committee will receive a recommendation asking the FCC to mandate the terminology and other items from that document for any agency using the IO spectrum in the public safety band for other than routine communications. He reported that: (a) Working Group 2, chaired by Kyle Sinclair, has been doing research within Federal, State, and local organizations for deriving reference documents for the Incident Command System; (b) Working Group 3, chaired by Carlton Wells, is working primarily on matters regarding the spectrum plan revision submitted at the June meeting; and (c) Working Group 4, chaired by Don Pfohl, still is working to identify chairs or conveners of the 700 MHz planning regions. He requested that anyone at today’s meeting please advise Mr. Pfohl whether a convener has been appointed for their region, saying Mr. Pfohl has identified only four or five conveners or chairs in the 55 regions.

Mr. Powell reported that most of yesterday’s Subcommittee meeting was spent working on its response to a number of questions in the Fourth NPRM. He explained that the three Subcommittees consolidated their deliberations from yesterday’s meetings into one document, copies of which were available at the entrance to today’s meeting.³ Regarding the question, “*Should additional interoperability channels be assigned to realize the four contiguous channel groups?*”, it was noted that the revised band plan approved by the Technology Subcommittee and forwarded to the Steering Committee at its June 2000, meeting proposed to assign four contiguous, 6.25 kHz channels to each of the IO channels. He said that discussion from the Technology Subcommittee yesterday resulted in the realization that, regardless of what technology is placed within the IO channels, the adjacent channel-interference potential will be the same, whether it’s a 6.25, 12.5, or 25 kHz channel. He noted in the proposed reply to the FCC’s question that if a 25 kHz trunked channel is established within a region with the authority of the regional planning committee (“RPC”), it still is the RPC’s responsibility to recognize there is interference potential on the next adjacent 6.25 kHz channel and to take that into account when doing its regional planning. He noted, further, that, if four 6.25 kHz channels are aggregated in a four-channel group, and a 12.5 kHz channel is centered in the middle of that group, there will be two 6.25 kHz channels remaining on either side of the 12.5 kHz channel. He suggested that these two 6.25 kHz channels be renamed “interoperability guard channels.” This would permit using them anywhere in the country without regard to who may be located on the adjacent channel. He stated that, based on yesterday’s discussion, it was apparent there were problems trying to run an IO operation and ending up in an area where the next adjacent channel is in use by the agency or agencies in the area in which one is trying to conduct IO operations. Thus, these protection channels would give maximum protection from interference. The Subcommittee proposed to rename the guard channels so they were not prohibited by current FCC rules from being used for IO purposes. Mr. Powell said that, consequently, the recommendation is against supporting the FCC’s proposed new band plan.

The Steering Committee thereupon reached consensus that it should adopt this proposal including the comments as its response to the Fourth NPRM.

³ “Consolidated Response to 4th NPRM Questions – NCC Interoperability and Technology Subcommittees,” Document #IO-0056A-20000913 (hereafter, “Consolidated Response”). This document contains various questions posed by the Fourth NPRM and the Subcommittees’ recommended responses to the Steering Committee for Steering Committee consideration. Editor’s note: Some of the responses in this document will be substantially set forth in the Minutes of today’s NCC meeting; other responses are quite lengthy and will be summarized as appropriate.

Mr. Powell then said that, regarding the question, “*Are there documented abuses of the NPSPAC channels that would justify the Commission requiring licensing of all portable/mobile units?*”, the proposed response/recommendation should be that, within many regions, complaints are received informally and handled on a case-by-case basis, often verbally, which usually results in corrective action technically or operationally. Thus, there often are not documented cases, but Regions can certainly provide testimony to support subscriber licensing. Mr. Powell solicited examples so they could be placed into the record

The Steering Committee reached consensus on this response, agreeing that any information documenting cases would be provided in the NCC’s response to the Fourth NPRM.

Mr. Powell said that, concerning the question, “*Would alphanumeric channel labeling be implemented even if the FCC did not require it by rule?*”, the recommendation is: “It is our belief that standardized, alphanumeric labeling of conventional interoperability channels will occur in a consistent manner nationwide only if it is mandated by the FCC. Manufacturers cannot be relied upon to voluntarily place software restrictions on labeling into their software unless it is mandated. This requirement should only apply to radios that include an alphanumeric display of eight or more characters. The conventional channel-labeling requirement must include a number of technical parameters associated with the particular standard selected. For example, if Project 25 Phase I is selected, parameters include frequency, System ID, Network Access Code, and Talkgroup ID.”

Robert Schlieman, New York State, said he favors uniform labeling as a requirement. The Steering Committee agreed and thereupon reached consensus on the foregoing response/recommendation to the Fourth NPRM.

Mr. Powell reported that the Interoperability Subcommittee had concluded that it would be impractical to require 700 MHz Public Safety radios to be programmed with every interoperability channel and every mode of interoperability channel operation. Thus, the IO Subcommittee was considering recommending a specific subset of IO channels that would be incorporated into each radio.

Mr. Powell said that as for the question, “*How is the NCC recommendation for alphanumeric channel labeling affected by trunked operation in which a radio may be used for secondary trunking and then reverts to untrunked operation when needed?*”, the response/recommendation is, “The proposed alphanumeric channel labeling requirement addresses only conventional channel assignments. Trunked operations have talkgroups that are irrespective of conventional channel labels and the parameters reflected in the previous question include a number of other similar parameters specific to each trunked system. Labeling of trunked talkgroups thus must be a function of the administrators of the individual trunked systems.”

The Steering Committee thereupon reached consensus on the foregoing response to the Fourth NPRM.

Mr. Powell next addressed the question, “*Should the access priorities used for CMRS [i.e., “priority access service,” or “PAS”] be used on, or adapted for, the 700 MHz Public Safety Band?*” by making the following recommendation: “The priorities developed for CMRS are primarily intended to address administrative priorities whereas the priorities proposed by the NCC for the interoperability channels are intended to address operational priorities. PAS is based upon the status of the user whereas the NCC priorities are based upon type of emergency. For instance, PAS would give the President priority for a call when in actuality the local emergency communications need could be significantly higher.”

In response to Mr. Wilhelm’s asking if Mr. Powell foresaw a conflict, particularly if there is federal participation, between PAS and the priority levels recommended by the Subcommittee, Mr. Powell responded that PAS applies to CMRS channels [as opposed to the public safety channels] and public safety priorities are based on the nature of the incident rather than the types of users. Ms. Kathleen Ham,

Deputy Chief, Wireless Telecommunications Bureau, FCC, stated that the priority access for CMRS is taken from the FCC's rules for wireline carriers, which, she said, are the same parameters wireline carriers adhere to in times of emergency. Others speaking concerning priority levels, telecommunications service priority ("TSP"), PAS and its implementation by the NCS (*i.e.*, National Communications System), *etc.*, were Carlton Wells, State of Florida, Robert Schlieman, Don Speights, and Harlin McEwen (who suggested that the answer "No" be given at the outset to the recommendation.)

The Steering Committee thereupon achieved consensus that "No" precede the recommended language.

Mr. Powell next addressed the question, "*Should monitoring or coverage requirements be adopted for the calling channels?*" He recommended the following response/language: "Yes; the calling channels are of no use unless they are monitored by an appropriate dispatch center(s). It is desirable that coverage be as reliable as the non-I/O system implemented by the same agency(ies). It must be reliable both at Dispatch and System Configuration levels. The NPSPAC Calling Channels are implemented successfully across the country primarily based upon coverage and monitoring requirements; consistency dictates the same for the 700 MHz band. Applicants should be required to submit calling-channel monitoring plans to RPCs and/or SIECs as part of a licensing approval process for base station applications for the calling channels."

Questions were then posed by Steven Proctor and Michael Wilhelm, and there were comments by Robert Schlieman, Kevin Kearns, King County, Washington, who suggested that language such as, "It is desirable that the coverage be comparable to the system, but the ultimate coverage for the calling channels should be at the discretion or judgment of the RPC or IO committee" be added to the recommendation. Mr. Powell also commented on the subject and, based on the discussion, said he would rearrange the wording of the recommendation and would include Mr. Kearns' suggestion.

With that understanding, the Steering Committee thereupon was in favor of the recommendation proposed by the Subcommittee and achieved consensus on the issue.

Mr. Powell also indicated the Subcommittee was on track with the Subcommittee's latest revisions of the milestones, with the major remaining item being to address being the operational requirements for the incident command system, which will be updated and given to the Steering Committee to review.

Technology Subcommittee Report. Glen Nash, Chair, reported that his Subcommittee had a productive meeting, made key recommendations, and arrived at consensus for submitting the recommendations to the Steering Committee. He noted that the Subcommittee reconsidered an encryption standard because it subsequently learned that the document forwarded to the Steering Committee at the San Francisco meeting was not necessarily complete. Thus, based on Subcommittee reevaluation of the standard, it reached consensus on a recommendation to adopt a document written as part of the Project 25 Series entitled, "ANSI TIA EIA 102.AAAA, The Project 25 DES Encryption Protocol," and this recommendation will be forwarded later for formal Steering Committee approval.

He said that there was Subcommittee consensus regarding receiver standards; that this standard should describe one level of performance, namely, an "A" level, which is applicable to major metropolitan areas; that a current ANSI receiver standard exists, namely, "ANSI TIA EIA 102.CAAB, The Digital C-4 FM/CQPSK Transceiver Performance Recommendations"(with seven specific sections of that document relating to performance of receivers), and that the Subcommittee would forward this recommendation to the Steering Committee for its action.

He said the Subcommittee also discussed specific questions in the Fourth NPRM. As to the question, "*Will revising the band plan by assigning four contiguous channels create adjacent channel interference problems?*", he said the Subcommittee position is, "No." He pointed out that that there will be no

additional interference problems that result, because whether a transmitter is operating in a 6.25 kHz FDM single-channel mode or one is aggregated with four adjacent, contiguous channels to be a four-slot TDMA-type mode, the energy put into the next adjacent 6.25 kHz channel is constant across the entire span.

Discussion then ensued, with Michael Wilhelm, Kathryn Hosford (formerly of the FCC's Public Safety and Private Wireless Division, currently with the FCC's Office of Engineering and Technology), Robert Schlieman, John Powell, Art McDole, representing APCO, Don Pfohl, and Glen Nash, either asking questions or providing information about, collectively, assignment of IO channels, general use channels, reserve channels, guard channels, adjacent channel interference, various channel groupings including 12.5 kHz, 6.25 kHz sets, *etc.*, surrounding band plans including the FCC's proposal in the Fourth NPRM and NCC's recommended revised band plan which it adopted at its June meeting. During the discussion, these channel plans were shown on an overhead screen. Mr. Wilhelm suggested that, based on the discussion, it appeared that characterization of the proposed response/recommendation for Steering Committee consideration would be that there would not be adjacent channel interference if the NCC's recommended band plan were adopted.

Based on the modifications discussed, the Steering Committee thereupon agreed to the recommended answer to the question in the Fourth NPRM and, thus, reached consensus on the issue.

Mr. Nash said the next question the Technology Subcommittee addressed was, "*What means, including a possible mandatory conversion date, are necessary to ensure a migration to 6.25 kHz technology on the interoperability channels?*" He stated that the first paragraph (of the Consolidated Response) provides the reasons the 12.5 kHz technology was selected with Project 25, Phase I, essentially based on maximizing the marketability of all four candidate technologies and not eliminating any of them from the marketplace at this time. He said the second paragraph (of the Consolidated Response) discusses the fact that, while Project 25, Phase I, does not comply with the FCC's desire for one voice per 6.25 kHz of bandwidth, it does comply with the rules as stated because it provides a data rate of 4800 kbps or greater. Thus, whether choosing to define 6.25 kHz technology as being one voice per 6.25 kHz, the Subcommittee recommends that, whereas it currently is necessary to select an IO standard to move forward on the general use channels, development of technology as applied to the general use channels should be allowed to mature. He thus said the recommendation was to put off the decision to a future date and that the FCC follow what happens in the general use channels rather than trying to dictate what happens on the IO channels. He suggested a future date of December 31, 2006, for action in arriving at a decision because that date is the end of the DTV transition period, when, in theory the spectrum is supposed to be fully available for public safety use.

Discussion then ensued. John Powell commented that it appeared the FCC's questions are driving the answers or soliciting responses based on things happening within the IO channels when in reality they should be based on what is occurring with the much larger number of general use channels. Richard DeMello wanted a fixed date (December 31, 2006) regarding revisiting the issue. Glen Nash and Harlin McEwen agreed. Robert Schlieman commented that the IO channels represent the lowest common denominator for all equipment operating in the band, the present technologies proposed can meet the 12.5 kHz FDMA FT-102, and pushing 6.25 kHz for the designated IO channels ahead of any change regarding these technologies' ability to handle 6.25 kHz is extremely premature. Don Pfohl agreed, saying the technology does not support use of 6.25 FDMA, and, thus, 12.5 kHz should be maintained until it is known something different could be done. Art McDole commented that until manufacturers produce equipment to work on a 6.25 channel, there is no IO channel that they can fit. Michael Wilhelm commented that, in addition to filing comments with the FCC for information purposes, public discussion as is occurring at today's meeting is another means because the Fourth NPRM proceeding is a "permit-but-disclose" proceeding (he explained what this entails). John Powell commented that NCC members could see other proposals coming forth from other organizations, which, in turn, could assist the Steering

Committee in the filing of Reply Comments in the Fourth NPRM. Tom Sorley, Orlando, commented that when the issue is revisited, it should encompass either a new standard for adoption or provide another date-specific deadline.

The Steering Committee thereupon reached consensus -- namely, that the Commission re-visit the IO standard (using the December 31, 2006, date) to evaluate market conditions relative to the development of technology; and, if an alternative IO standard is then evident, such technology could be selected along with an appropriate transition plan to provide for implementation, because it is premature to forecast what that technology might be or how quickly it might be implemented.

Next, Mr. Nash addressed the question, “*If 12.5 kHz channels are used for data transmission, what is necessary to ensure a migration to 6.25 kHz technology for the data interoperability channels?*” He said the recommended response includes the fact that the trend in data communications is towards higher data rates. (Also as set forth in the Consolidated Response, the following is the recommended response): The data IO standard recommended (Project 25, Phase I) already complies with the FCC requirement for 4.8 kbps channel rate per 6.25 kHz of bandwidth; thus, there is no need for a migration plan to 6.25 kHz technology. While it may become possible in the future to attain a 9.6 kbps channel rate within a 6.25 kHz bandwidth channel, the more likely movement will be toward higher channel bit rates within the 12.5 kHz (or wider) bandwidths to improve data throughput. The primary requirement for data transmission from an operational viewpoint is “speed of transmittal” (*i.e.*, how quickly can a fixed amount of data be transmitted) which translates into higher data rates, not narrower bandwidths.

A lengthy discussion then ensued. Participants commenting included John Powell, Art McDole, Steve Proctor, Harlin McEwen, Robert Schlieman, Don Pfohl, Kathleen Ham, Glen Nash, Bob Gurss, Kathryn Hosford, Marilyn Ward, Timothy Loewenstein, Steve Mueller, Carlton Wells, and Robert Speidel. Topics of discussion essentially centered on measurement of spectrum efficiency of data *vis-à-vis* through-put and channel width; and comments that 12.5 kHz IO channels are more desirable than 6.25 kHz for various reasons. In particular, a number of the commenters (including the bulk of the foregoing-named persons comprising NCC Steering Committee, Subcommittee, and Working Group members) took issue with the FCC’s suggested migration path towards 6.25 kHz. Various commenters pointedly stated that, from the public safety users’ perspective, “IO right now and for the foreseeable future is 12.5 kHz, not 6.25 kHz.” Explanations were provided as to the reasons that 6.25 kHz is unworkable at this time, that there is no known technology that will send data at 6.25 kHz, that the users want to be on 12.5 kHz and not 6.25 kHz, that it is important to consider two competing goals, *i.e.*, interoperability and efficiency and, thus, because the focus is mainly on interoperability, 12.5 kHz is needed. It was also mentioned that efficiency is more of a concern in the general use channels, which is where most of the spectrum use is located and where efficiency is of greater concern. Kathleen Ham stressed that the NCC’s comments to the Fourth NPRM should provide as much specificity as possible for the record regarding both the migration path issue and the other questions posed in the Fourth NPRM. She also said that the FCC still has the Third Memorandum Opinion and Order and Third Report and Order related to the Public Safety docket, which, hopefully, will be released shortly because there are issues contained in it which pertain to the public safety community. When Ms. Ham was told that the comment due dates were tight and the NCC does not have the luxury of full-time personnel (as opposed to other organizations) to file detailed information, Ms. Ham suggested that requests for extensions of time could be filed.

Kathryn Hosford suggested that the NCC also consider the need for the number of data IO channels if it continues to maintain that it needs a higher bit rate at 12.5 kHz, *i.e.*, a balance must be struck in that, given two data channels at 12.5 kHz, if the IO spectrum has many users, the public safety community might need to look at more channel availability rather than necessarily higher data rates. Additionally, there was a rhetorical question that if the FCC were to mandate 6.25 kHz, would manufacturers build equipment?

Mr. Wilhelm asked Mr. Nash how would he modify the recommended response, if at all, based on the comments he was hearing regarding the migration issue. Mr. Nash responded that the comments seem to militate towards having the technology first be developed for use on the general use channels and then let the IO spectrum channels follow. He also said that this characterization needs to be incorporated into the recommended response. When asked about the cost associated with transitioning to narrowband technology, Mr. Nash rhetorically asked that because 6.25 kHz equipment is not available, does it thus mean it is either tremendously costly or not costly at all? He also said the rule of thumb is that portable equipment lasts about seven years, mobile equipment at base stations, about ten years, but that many agencies use equipment over 20 to 30 years old. He added that, currently, mobile and hand-held units cost between \$2,000.00 and \$3,000.00 whereas similar-type units in the analog world cost between \$800.00 to \$1,000.00, and converting to digital is costing quite a lot.

Mr. Loewenstein expressed the view that, based on the discussion regarding the migration-path question and also the preceding question (*i.e.*, the “*means/possible mandatory conversion date*” question), answers to these two Fourth NPRM questions need to be expanded dramatically. Mr. Speidel agreed. Mr. Wilhelm then stated it was understood that, regarding the instant “migration path” question, the NCC first should lay a foundation for why it might or might not be desirable to go to 6.25 kHz channels and under what circumstances, then essentially provide the answer that already exists in the Subcommittee’s document; and that the introduction to the comment should include a disclaimer that it represents the consensus of the NCC, not necessarily the views of each Steering Committee member. Mr. McEwen commented that it has been made clear that the NCC doesn’t think it desirable to go to 6.25 kHz, and Marilyn Ward agreed. Kathleen Ham said she is glad the NCC will attempt to present greater detail as to the issues in this regard. Ms. Ward said that when the consensus portion is mentioned, it should not be too close to the NCC statement that the NCC does not support an immediate move to 6.25, meaning that when the NCC gives those two statements, they are not diluted.

Mr. Nash then said the question, “*What encryption standard should be adopted?*” has been answered already (in his Report earlier during the meeting) because the Technology Subcommittee has made a recommendation to adopt DES operating in the single feedback mode as described in an existing document.

The Steering Committee thereupon agreed to proceed to recommend DES as the encryption standard.

Mr. Nash said that the final question assigned to his Subcommittee was, “*Should manufacturers be required to label radios with an indication of their interference susceptibility?*” He said, based on the recommendation concerning receiver standards, this question now is moot in that nothing is to be gained by placing a label on the radio.

The Steering Committee, indicating no further discussion on this issue was needed, thereupon agreed that this was its view.

Mr. Nash concluded his report by saying the Subcommittee did not discuss wideband data standards for the 50 and 150 kHz-wide channels because neither of the two Subcommittee individuals leading that effort were present. He added, though, that a particular technology was presented for consideration at the TIA August meetings in Houston; however, it is doubtful that the standard will be completed by February or even by year end; but work is moving forward on a wideband standard.

Mr. Powell noted that the encryption standard described by Glen Nash is pending publication, that after reviewing document references in the Fourth NPRM, he looked at the Project 25 Phase I standards and, with the exception of one encryption document, they now are published by ANSI. Thus, Mr. Powell said the references in the FCC’s documents could be amended to reflect they now are ANSI standards.

Implementation Subcommittee Report. Lt. Ted Dempsey, Chair, reported that the Subcommittee's focus was on the question, "*The NCC's recommendations on requiring memoranda of understanding are unclear. What did the NCC intend?*" He said the Subcommittee clarified its position on why MOUs are important for the interoperability channels. He said the position is that it would provide SEICs or the RPCS with a tool to manage the inventory and use of channels as well as giving the users the system guidelines, which, in turn, greatly facilitates enforcing proper use of the IO channels. He said the Subcommittee also reaffirmed its belief that MOUs for the IO channels should be required by whatever entity is managing the IO spectrum.

He further said that the Subcommittee requested to add an additional comment regarding using the pre-coordination database by reaffirming its position that the pre-coordination database be required for the regional planning process and the application process. He pointed out that, while there are a couple of reasons outlined in the statement, the primary one is to allow the Regions to coordinate across the borders, especially in the States that are surrounded by other states, *i.e.*, land-locked, in other regions. He thus expressed the belief that the intent of the pre-coordination database will reduce the amount of FCC intervention concerning border disputes. Mr. Dempsey said that, in response to the Fourth NPRM question asking if there are alternative systems that could be used for pre-coordination and assistance in planning, he did not think there were any alternatives.

The Steering Committee thereupon expressed its agreement that it was prepared to recommend to the FCC that the FCC rules require the use of a pre-coordination database.

Tim Loewenstein then suggested that comment on reinforcing the pre-coordination database be made very strong. Mr. Powell said that, although the Fourth NPRM discusses the database in terms of IO, the database really is needed for general use and not IO. Mr. Dempsey said the recommendation pertains to the entire assignment and application process and is not unique to the IO channels. Mr. Schlieman suggested that the FCC be reminded that the database would greatly solve the difficulties that occurred between Region 20 and Region 28 in the NPSPAC plan when they failed to notify each other. Mr. Wilhelm noted that NPSPAC had a press release available on the table outside the Auditorium dealing with funding of the pre-coordination database. Art McDole said that while he believes the FCC is committed to the value of a database, he is concerned that the FCC might be fearful of having to fund the database at a late date. Ms. Ward said all four coordinators support the database, and Mr. Dempsey said that the database was developed through NPSTC in addition to the four coordinators; thus, there is a need for it. Mr. Nash said the FCC should mandate use of the database because the public safety community cannot allow anyone to choose to opt out.

Receiver Standards. Mr. Wilhelm pointed out, that although Glen Nash discussed the receiver standards and that the Technology Committee had recommended adoption of the ANSI 102 transceiver performance standards, the Steering Committee had not had the opportunity to indicate if there were consensus on adoption of that standard. Mr. Speidel said that, if the TIA document were going to be recommended, he thought it should be made very clear that it is only for 6.25 and 12.5 kHz and that there should be language about the development of the appropriate or commensurate requirements for 25 kHz. Mr. Nash said a question arose at the Technology Subcommittee meeting whether it is within the purview of the Subcommittee to be recommending a standard for receiver standards applicable to the entire public safety band, including the general use channels, or is the recommendation to be limited to the IO channels? Mr. Speidel said that, because the Fourth NPRM seeks comment on whether the FCC should establish interference standards for receivers operating on public safety frequencies, he believed both were covered. Mr. Wilhelm agreed with Mr. Speidel's interpretation. Based on a question from Mr. Gurs regarding the degree to which the NCC comments he was to draft would address the receiver standards issue, Mr. Wilhelm said he sensed it was the intention of the Steering Committee that the comments address both the general use and IO portions of the spectrum and inquired whether the Steering Committee agreed. Ms. Ward concurred with Mr. Wilhelm. In response to Mr. Gurs' asking if the

Steering Committee wanted to indicate its support for use of receiver standards as a general principle, Mr. Wilhelm, believing the matter was clear, answered "yes." Mr. Schlieman said he had no problem if the comments discussed receiver standards. Based on Mr. Gurrs' inquiry about the status of the revised channel plan (shown earlier during the meeting), Mr. Wilhelm said that plan had been reviewed and approved by the Steering Committee, and no one disagreed.

Public Participation/Discussion. Mr. Wilhelm opened the floor for public discussion. Mr. Schlieman said he wanted to submit to the NCC a New York State analysis regarding DTV (*i.e.*, "New York State's Analysis of the Canadian DTV Transition Allotment Plan and Recommendations" (Aug. 28, 2000)), which he provided in both copy and compact disk form.

Kathleen Ham said that, on behalf of the FCC, she wanted to thank the NCC members and subcommittees for all of their work, and she expressed the Commissioners' appreciation for their efforts.

Future Meeting Dates and Locations. Mr. Wilhelm reminded attendees that the next set of NCC meetings would be held on Wednesday, November 1, and Thursday, November 2, 2000, at FCC Headquarters, Commission Meeting Room Washington, D.C. (Editor's note: subcommittees would meet November 1, and the NCC General Membership would meet November 2, at 9:30 a.m., planning to finish at 12:30 p.m. -- per previous June meeting discussion.)

Mr. Wilhelm said that Marilyn Ward offered to be host of the next NCC meetings in Orlando. Upon inquiring of the attendees, with no objections thereto, consensus established that the NCC would meet in Orlando, Florida, on January 18 and 19, 2001, with a location near the airport to be determined later.

Close of Meeting: Mr. Wilhelm thanked the attendees for their participation, hard work, and looked forward to seeing them at the next meeting. He also thanked Don Speights for the Department of Commerce's hospitality for the NCC's use of Department's facilities.

(Whereupon the meeting was adjourned at approximately 12:25 p.m., Friday, September 15, 2000.)

Prepared by: Bert Weintraub
Attorney Advisor
Public Safety & Private Wireless Division
Wireless Telecommunications Bureau
Federal Communications Commission

Certified as to accuracy:

Michael Wilhelm

Date: _____

NCC ATTENDANCE ROSTER FOR September 15, 2000

| <i>Last Name</i> | <i>First Name</i> | <i>Meeting Date</i> |
|------------------|-------------------|---------------------|
| Allen | Richard | September 15, 2000 |
| Ashley | Don | September 15, 2000 |
| Beeferman | Steven | September 15, 2000 |
| Biby, P.E. | Richard P. | September 15, 2000 |
| Blake | Richard | September 15, 2000 |
| Blake | Richard | September 15, 2000 |
| Brown | K. Terrell | September 15, 2000 |
| Brown | Michael | September 15, 2000 |
| Byrnes CEM | Joseph | September 15, 2000 |
| Carter | Renaë | September 15, 2000 |
| Coltri | Norman | September 15, 2000 |
| Cowper | Thomas | September 15, 2000 |
| DeMello | Richard | September 15, 2000 |
| Dempsey | Edward | September 15, 2000 |
| Descoteaux | Celeste | September 15, 2000 |
| DiRaimo | Sal | September 15, 2000 |
| Dunn | Frank | September 15, 2000 |
| Eckert | Bob | September 15, 2000 |
| Eierman | David | September 15, 2000 |

Tuesday, October 17, 2000

Page 1 of 4

| <i>Last Name</i> | <i>First Name</i> | <i>Meeting Date</i> |
|------------------|-------------------|---------------------|
| Einreinhofer | Paul | September 15, 2000 |
| Farquhar | Michele | September 15, 2000 |
| Ferrell | Robert | September 15, 2000 |
| Forsgren Weaver | Heather | September 15, 2000 |
| Frackleton | Steve | September 15, 2000 |
| Franklin | Karen | September 15, 2000 |
| Frye | Richard | September 15, 2000 |
| Gillory | Ronald | September 15, 2000 |
| Gurss | Robert | September 15, 2000 |
| Ham | Kathleen | September 15, 2000 |
| Haraseth | Ron | September 15, 2000 |
| Hoffman | Charles | September 15, 2000 |
| Kearns | Kevin | September 15, 2000 |
| Leland | Wayne | September 15, 2000 |
| Loewenstein | Timothy | September 15, 2000 |
| Marshall | Ross | September 15, 2000 |
| Mayworm | Ronald | September 15, 2000 |
| McDole | Art | September 15, 2000 |
| Mueller | Steven | September 15, 2000 |

Tuesday, October 17, 2000

Page 2 of 4

| <i>Last Name</i> | <i>First Name</i> | <i>Meeting Date</i> |
|------------------|-------------------|---------------------|
| Nash | Glen | September 15, 2000 |
| O'Hara | Ellen | September 15, 2000 |
| O'Hara | Sean T. | September 15, 2000 |
| Orsulak | Rich | September 15, 2000 |
| Pfohl | Don | September 15, 2000 |
| Proctor | Steven | September 15, 2000 |
| Rinehart | Bette | September 15, 2000 |
| Salb | Brian | September 15, 2000 |
| Satche | Solomon | September 15, 2000 |
| Schlieman | Robert F. | September 15, 2000 |
| Shahnami | Alireza (Ali) | September 15, 2000 |
| Siegle | Derek | September 15, 2000 |
| Sines | Sgt. Stanley A. | September 15, 2000 |
| Slipakoff | Pam | September 15, 2000 |
| Sorley | Tom | September 15, 2000 |
| Speidel Esq. | Robert | September 15, 2000 |
| Speights | Don | September 15, 2000 |
| Tolman | Tom | September 15, 2000 |
| Vogel | Emil | September 15, 2000 |

Tuesday, October 17, 2000

Page 3 of 4

| <i>Last Name</i> | <i>First Name</i> | <i>Meeting Date</i> |
|------------------|-------------------|---------------------|
| Walchak | David | September 15, 2000 |
| Ward | Marilyn | September 15, 2000 |
| Wells | Carlton | September 15, 2000 |
| Werth | Erik | September 15, 2000 |

Total for Attendance Roster: 61